REMARKS

Applicant's attorney thanks the Examiner for the telephone interview of August 11, 2004. This amendment follows the outcome of that interview. Claims 1-20 are pending in the application. Claims 1-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Paradine et al. (U.S. Patent No. 6,049,565) in view of Sato et al. (U.S. Patent No. 6,078,882). Claims 21-26 are newly added. Of the Claims, Claims 1, 7, 14, 19, 20, 21, 23, and 25 are independent claims. The Applicant respectfully traverses the rejections.

The Applicant claims a method and apparatus for identifying the type of audio stored in the payload of a data packet. The state of a non-speech identifier included in a header in the received data packet identifies the type of audio stored in the payload of the received packet as non-speech (no spoken words included in the audio) or speech (spoken words included in the audio). Jitter buffer latency can be modified in a receiver dependent on the state of the non-speech identifier included in the header. The non-speech identifier is a one bit field included in a header. In one embodiment, a user definable marker field in an RTP header is defined as the non-speech identifier. (*See* Page 6, lines 17-22; Page 7, lines 4-9 in the Applicant's specification as originally filed.)

Paradine discusses an audio communications apparatus which reduces data network traffic by only transmitting voice data. When no voice activity is detected, transmission is suspended. Thus, only samples with voice activity are received by the receiver. While transmission is suspended, the receiver outputs nothing or comfort noise. Instead of transmitting silence or background noise during an inactive period when there is no voice data to transmit, an indication of the elapsed time between voice activity periods is transmitted. (*See* Col. 2, lines 30-54; col. 6, lines 26-36; Fig. 5, step 510; Col. 8, lines 22-44.)

Sato discusses detection of speech spurts and extraction of speech during hangover periods immediately following transitions of speech spurts to pauses. Only speech spurts and extracted speech during hangover periods are transmitted in a payload of a data packet, both of which are speech.

Paradine does not teach or suggest the Applicant's claimed "add header routine which stores a non-speech identifier with the audio in the data packet, the non-speech identifier being

stored in a header in the data packet." Paradine does not even discuss a header in a data packet. Paradine merely indicates that samples are incorporated into a suitable packet. (*See* Col. 6, lines 5-6.) Furthermore, in the system discussed by Paradine, only speech data is transmitted in order to reduce data network traffic. As shown in Fig. 5, at step 510, if there is voice activity detected in the sample, the sample is stored in memory and at step 525, the samples in memory are transmitted. Comfort noise must be regenerated at the receiver for the time period in which no speech data is received. Thus, Paradine merely describes a system which does not transmit audio while there is no voice activity and instead regenerates comfort noise in the receiver while no audio is received. As discussed in the Applicant's specification, the generation of comfort noise by the receiver instead of transmitting non-speech data reduces the quality of the real-time audio. In the Applicant's claimed invention, both non-speech data and speech data are transmitted improving the quality of the real-time audio. By identifying whether non-speech data is stored in the payload of a data packet, and transmitting both speech and non-speech data, the quality of the received audio is improved without losing speech data because the jitter buffer latency can be modified while non-speech data is stored in the payload of a received data packet.

Sato's discussion of an identifier to indicate whether the payload is a speech spurt or extracted speech during a hangover period, for purposes of deciding whether to add noise in a receiver does not teach or suggest the Applicant's claimed "non-speech identifier". Furthermore, Sato does not even suggest storing non-speech audio in the payload of the data packet. Instead, Sato's receiver generates the non-transmitted background noise upon detecting non-receipt of data packets and inserts the generated noise into a pause. (See Fig. 1 (noise interpolator (9)); Fig. 2; Fig. 3; Fig. 5; Col. 4, lines 50-57; Col. 5, lines 16-17; Col. 5, line 67 - Col. 6, line 10; and Col. 6, lines 44-51.)

None of the cited art singly or in combination teaches or suggests storing "a non-speech identifier with the audio in the data packet, the non-speech identifier being stored in a header of the data packet" as claimed by the Applicant in independent Claim 1. There is no teaching or suggestion in either Paradine or Sato for storing a non-speech identifier with the audio in the data packet. Referring to Figs. 2 and 3 of Sato, voice packets are only transmitted during speech spurts and hangover periods and include voice data. No voice packet is sent during a pause. As shown in Fig. 4 of Sato, a third level generator 904 in the noise interpolator 9 in the receiver 3

shown in Fig. 1 generates white noise to insert into the pauses. (*See* Col.5, line 57 – col. 6, line 4.) Referring to Figs. 4 and 5 of Paradine, only samples (410) in which voice activity is detected (at step 510) are stored in memory (at step 520) and transmitted (at step 525). Therefore, both Paradine and Sato only discuss transmitting audio that includes voice activity. Thus, there is no suggestion to add a non-speech identifier because non-speech audio is never transmitted. There is no suggestion to combine Paradine and Sato, and even if combined they fail to teach the claimed "non-speech identifier in the header of a received data packet" which is used to determine "if non-speech audio is stored in the payload of the data packet." The combination merely describes a system in which only speech audio is transmitted and comfort noise is generated by the receiver for periods in which no audio is being received.

The above quoted claim language is in base Claims 1, 7, 14, 19 and 20. Claims 2-6 are dependent on Claim 1, Claims 8-13 are dependent on Claim 7 and Claims 15-18 are dependent on Claim 14 and thus include this limitation over the prior art.

Thus, neither Paradine or Sato nor any of the cited prior art teach or suggest the Applicant's claimed method and apparatus which detects the state of the non-speech identifier in the header of the received data packet to determine if non-speech audio is stored in the payload of the data packet. Accordingly, the present invention as now claimed is believed to be patentably non-obvious over the cited art. In view of the foregoing, removal of the rejections under 35 U.S.C. § 103(a) and acceptance of Claims 1-20 are respectfully requested.

CONCLUSION

In view of the above amendment and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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Dated: 8/18/04